UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,250	07/11/2003	Lance A. Tatman	10021014-1	4605
	7590 08/11/200 CHNOLOGIES, INC.	EXAMINER		
Legal Departme	ent, DL429	WON, MICHAEL YOUNG		
P.O. Box 7599	perty Administration	ART UNIT	PAPER NUMBER	
Loveland, CO 8	30537-0599	2155		
			MAIL DATE	DELIVERY MODE
			08/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summers		Application	plication No. Applicant(s)				
		10/618,25	50	TATMAN ET AL.			
	Office Action Summary	Examiner		Art Unit			
		MICHAEL	Y. WON	2155			
Period fo	The MAILING DATE of this communication a or Reply	ppears on the	cover sheet with the c	orrespondence ac	ldress		
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REF CHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the mained patent term adjustment. See 37 CFR 1.704(b).	DATE OF TH 1.136(a). In no even od will apply and wi tute, cause the app	IIS COMMUNICATION ent, however, may a reply be tin Il expire SIX (6) MONTHS from ication to become ABANDONE	<b>J.</b> nely filed the mailing date of this c D (35 U.S.C. § 133).			
Status							
1) 又	Responsive to communication(s) filed on <u>11</u>	June 2008					
•		nis action is n	on-final				
3)	Since this application is in condition for allow			secution as to the	e merits is		
٠,١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
4)🛛	Claim(s) 1-51 is/are pending in the application	on.					
·	4a) Of the above claim(s) is/are withd	rawn from co	nsideration.				
	Claim(s) is/are allowed.						
•	Claim(s) <u>1-51</u> is/are rejected.						
	Claim(s) is/are objected to.						
-	Claim(s) are subject to restriction and	l/or election re	equirement.				
Applicati	on Papers						
9)□	The specification is objected to by the Exami	ner.					
•	The drawing(s) filed on is/are: a) ☐ a		objected to by the I	Examiner.			
,	Applicant may not request that any objection to the	-	-				
	Replacement drawing sheet(s) including the corre				FR 1.121(d).		
11)	The oath or declaration is objected to by the	-			, ,		
Priority ι	ınder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date  4) Interview Summary (PTO-413) Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:							

Art Unit: 2155

## **DETAILED ACTION**

1. This action is in response to the amendment filed June 11, 2008.

2. Claims 1-51 have been examined and are pending with this action.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8, 10-14, 16, 17, 22-24, 26-30, 32-34, and 39-51 are rejected under 35 U.S.C. 102(b) as being anticipated by LeBlanc et al. (US 6,236,365).

## **INDEPENDENT:**

As per **claim 1**, LeBlanc teaches a system for physical location self awareness in network connected devices, said system comprising:

a location server acquiring locations of said devices from a real-time location system (see col.11, lines 3-9: "module");

an agent operable to run on each of said devices (see col.8, lines 21-24: "intelligent agent-based location services. Parameters my include time, location, and user-specific and/or group specific criteria"), said agent querying said location server for a location of said device (see col.13, lines 45-49, 53-58 & 63-67: "provides location

information to either the initiating caller who wishes to learn of his location") and storing location information for said device on said device (see col.59, lines 4-5); and

wherein when said location server is unable to satisfy said query for said location of said device, said location server is operable to query a hierarchical server that is operable to query other location servers for the location of said device (see col.13, lines 12-21 and col.63, lines 42-56: "The location application programming interface 136 then communicates with one or more mobile switching centers 108, to determine whether or not the mobile station 140 to be located can be located").

As per **claim 24**, LeBlanc teaches a method for providing location self awareness in a network connected device, said method comprising:

establishing a location server for acquiring a location of said device from a realtime location system (see col.11, lines 3-9: "module");

executing an agent on said device (see col.8, lines 21-24: "intelligent agent-based location services. Parameters my include time, location, and user-specific and/or group specific criteria");

instructing, by said agent, said device to send a query to said location server for location information for said device (see col.13, lines 45-49, 53-58 & 63-67: "provides location information to either the initiating caller who wishes to learn of his location");

wherein when said location server is unable to provide said location information for said device in response to said query, then said location server querying a hierarchical server to obtain said location information from another location (see col.13,

lines 12-21 and col.63, lines 42-56: "The location application programming interface 136 then communicates with one or more mobile switching centers 108, to determine whether or not the mobile station 140 to be located can be located"); and

Page 4

storing said location information for said device on said device (see col.59, lines 4-5).

As per **claim 39**, LeBlanc teaches a system for physical location self awareness in a network connected device across a domain of a plurality of related real-time location systems, said system comprising:

a plurality of location servers, each location server acquiring locations of devices under a real-time location system associated with said location server (see col.11, lines 3-9 and col.13, lines 12-17: "modules");

an agent operable to run on each of said devices (see col.8, lines 21-24: "intelligent agent-based location services. Parameters my include time, location, and user-specific and/or group specific criteria"), said agent on a device querying a nearest location server associated with said device for a location of said device (see col.13, lines 45-49, 53-58 & 63-67: "provides location information to either the initiating caller who wishes to learn of his location") and storing location information for said device on said device (see col.59, lines 4-5); and

a hierarchical server adapted to querying each of said location servers for a location of said devices if said nearest location server fails to return a location of said device (see col.13, lines 12-21 and col.63, lines 42-56: "The location application

programming interface 136 then communicates with one or more mobile switching centers 108, to determine whether or not the mobile station 140 to be located can be located").

As per **claim 45**, LeBlanc teaches a method for physical location self awareness in network connected devices across a domain of a plurality of related real-time location systems, said method comprising:

establishing a plurality of location servers, each of said location servers acquiring locations of said devices under a real-time location system associated with said location server (see col.11, lines 3-9 and col.13, lines 12-17: "modules");

executing an agent on each of said devices (see col.8, lines 21-24: "intelligent agent-based location services. Parameters my include time, location, and user-specific and/or group specific criteria");

instructing, by said agent, that an associated device send a query for location information of said device to a nearest location server associated with said device (see col.13, lines 45-49, 53-58 & 63-67: "provides location information to either the initiating caller who wishes to learn of his location");

querying, by the hierarchical server, upon failure of said nearest location server to return a location of said device, each of said location servers for a location of said device (see col.13, lines 12-21 and col.63, lines 42-56: "The location application programming interface 136 then communicates with one or more mobile switching

centers 108, to determine whether or not the mobile station 140 to be located can be located"); and

storing, by said agent, returned location information for said device on said device (see col.59, lines 4-5).

## **DEPENDENT:**

As per **claim 2**, which depends on claim 1, LeBlanc further teaches wherein said location server maintains said locations of said devices in a database (see col.40, TABLE SP-2).

As per **claim 3**, which depends on claim 2, LeBlanc further teaches wherein said location server acquires said locations of said devices when said location server is established (see col.8, line 5).

As per **claims 4 and 29**, which respectively depend on claims 1 and 24, LeBlanc further teaches wherein said location server acquires said location from said real-time location system upon said agent querying said location server for a location of said device (see col.8, lines 1-5).

As per **claims 5, 14, and 30**, which respectively depend on claims 1, 13, and 24, LeBlanc further teaches wherein said location server is an extension of said real-time location system (see col.7, lines 35-43).

As per **claim 6**, which depends on claim 1, LeBlanc further teaches wherein said agent is software executed by said device (see col.10, line 20).

Art Unit: 2155

As per **claim 7**, which depends on claim 1, LeBlanc further teaches wherein said agent is a process incorporated into said device (see col.8, line 4).

As per **claim 8**, which depends on claim 7, LeBlanc further teaches wherein said agent is incorporated into firmware of said device (see col.8, line 4).

As per **claim 10 and 26**, which respectively depend on claims 1 and 24, LeBlanc further teaches wherein said agent periodically queries said location server (see col.14, lines 10-14).

As per **claims 11 and 27**, which respectively depend on claims 1 and 24, LeBlanc further teaches wherein said agent stores said location of said device in memory of said device (see col.59, lines 4-5).

As per **claims 12 and 28**, which respectively depend on claims 1 and 24, LeBlanc further teaches wherein said agent stores said location of said device in mass storage of said device (see col.54, lines 36-41 and col.59, lines 4-5).

As per **claim 13**, which depends on claim 1, LeBlanc teaches further comprising said real-time location system comprising: a tag associated with each device to be tracked (see col.63, lines 38-44); a plurality of receivers, said receivers locating each of said tags (see col.63, lines 44-50); and a central database of locations of said tagged devices (see col.47, TABLE SP-5 and lines 57-65).

As per **claims 16 and 32**, which respectively depend on claims 1 and 24, LeBlanc further teaches wherein said location server pushes location information updates to devices when location data on said location server changes (see col.14, lines 1-4).

Art Unit: 2155

As per **claim 17**, which depends on claim 1, LeBlanc further teaches wherein said location information stored on said device is accessible by a user networked to said device (see col.13, lines 45-49, 53-58 & 63-67).

Page 8

As per **claim 22**, which depends on claim 1, LeBlanc teaches of further comprising a plurality of real-time location systems (see col.48, lines 10-15).

As per **claim 23**, which depends on claim 22, LeBlanc teaches of further comprising a location server associated with each of said real-time location systems and a hierarchical server for searching for a location of a device starting from a last known location server outward to a next closest location server (see col.63, lines 50-56 & col.67, lines 52-55).

As per **claim 33**, which depends on claim 32, LeBlanc further teaches wherein, said location information updates are pushed only to devices for which location information has changed (see col.10, lines 19-37 and col.14, lines 1-16).

As per **claim 34**, which depends on claim 24, LeBlanc further teaches comprising: providing access to said stored location information via a network (see col.19, lines 37-42).

As per **claims 40 and 46**, which respectively depend on claims 39 and 45, LeBlanc further teaches wherein said hierarchical server queries a next closest location server when said nearest server fails to return a location of said device (see col.63, lines 50-56 & col.67, lines 52-55).

As per **claims 41 and 47**, which respectively depend on claims 40 and 46, LeBlanc further teaches wherein said hierarchical server queries a further next closest location server when said next closest server fails to return a location of said device (see col.63, lines 50-56 & col.67, lines 52-55).

As per **claims 42 and 48**, which respectively depend on claims 39 and 45, LeBlanc further teaches wherein a newly assigned location server pushes a location information update for a moved device (see col.14, lines 1-16 and col.63, lines 50-56).

As per **claims 43 and 50**, which respectively depend on claims 42 and 48, LeBlanc further teaches wherein said location information update is pushed to a previous location server to which said moved device was assigned (see col.14, lines 1-16 and col.63, lines 50-56).

As per **claims 44 and 51**, which respectively depend on claims 42 and 48, LeBlanc further teaches wherein said location information update is pushed to said moved device (see col.14, lines 1-16 and col.63, lines 50-56).

As per **claim 49**, which depend on claim 48, LeBlanc further teaches wherein said pushing is carried out in response to said device moving into said newly assigned location server's associated real-time locations system's area (see col.14, lines 1-16).

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 9 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeBlanc et al. (US 6,236,365) in view of Girard (US 2003/0005316).

As per **claims 9 and 25**, which respectively depend on claims 1 and 24, Although LeBlanc teaches of said agent, LeBlanc does not explicitly teach querying said location server on boot of said device.

Girard teaches querying said location server on boot of said device (see page 3, [0030]: "to determine the current location of the mobile PC 100 during boot-up").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of LeBlanc in view of Girard by implementing querying said location server on boot of said device. One would be motivated to do so because LeBlanc teaches of trigger-based delivery of location information (see col.8, line 1-5) and specifying boot-up of a device as the trigger point is subjective.

5. Claims 15 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeBlanc et al. (US 6,236,365) in view of Raz et al. (US 5,852,715)

As per **claims 15 and 31**, which respectively depend on claims 13 and 24, LeBlanc teaches all the limitations except wherein said location server comprises a duplicate of said central database.

Raz teaches wherein a server comprises a duplicate of said central database (see col.2, lines 40-53: "mirroring" and col.8, lines 46-50: "duplicate copy of the database").

Art Unit: 2155

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of LeBlanc in view of Raz so that a server comprises a duplicate of said central database. One would be motivated to do so because such implementation is known in the art for backup recovery.

7. Claims 18-21 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeBlanc et al. (US 6,236,365) in view of Land et al. (6,008,805).

As per **claims 18 and 35**, which respectively depend on claims 17 and 34, Although LeBlanc teaches of accessing location information, LeBlanc does not explicitly teach wherein information is accessible by said user via a shell.

Land teaches accessing information by said user via a shell (see col.7, lines 14-18: "script").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of LeBlanc in view of Land so that information is accessible by said user via a shell. One would be motivated to do so because one of ordinary skill in the art knows that shells are a means for users of a Unix operating system to interface commands with the operating system to perform some functionality with the outside world. Unix is one of a plurality of operating systems available in computer systems employed today.

As per claims 19 and 36, which respectively depend on claims 17 and 34, Although LeBlanc teaches of accessing location information, LeBlanc does not explicitly

teach wherein information is accessible by said user via a simple network management protocol.

Land teaches accessing information by said user via a simple network management protocol (see col.5, line 64 - col.6, line 2: "SNMP manager 320 of access device 300 is aware of network and can provide an interface optimized for speed and navigability. The user interface may…").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of LeBlanc in view of Land so that information is accessible by said user via a simple network management protocol. One would be motivated to do so because Land teaches that SNMP provides the ability to manage a user interface and at the same time check for consistency and safety of user commands (see col.2, lines 35-39).

As per **claims 20 and 37**, which respectively depend on claims 19 and 24, Although LeBlanc teaches of accessing location information, LeBlanc does not explicitly teach wherein information is stored in a simple network management protocol management information base variable.

Land teaches storing information in a simple network management protocol management information base variable (see col.2, lines 17-23: "access to the configuration variables of a device through a Management Information Base").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of LeBlanc in view of Land so that information is stored in a simple network management protocol management information base

variable. One would be motivated to do so because Land teaches that SNMP provides the ability to manage a user interface and at the same time check for consistency and safety of user commands (see col.2, lines 35-39).

As per **claims 21 and 38**, which respectively depends on claims 20 and 37, LeBlanc does not explicitly teach wherein said variable is system information for the device.

Land teaches wherein said variable is system information for the device (see col.2, lines 17-23: "access to the configuration variables of a device through a Management Information Base").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of LeBlanc in view of Land so that said variable is system information for the device. One would be motivated to do so because such implementation allows associating the location of the mobile device of LeBlanc to the mobile device itself.

# Response to Arguments

8. Applicant's arguments filed June 11, 2008 have been fully considered but they are not persuasive.

In response to the argument of claim 1, that LeBlanc does not disclose the feature "an agent operable to run on each of said devices, said agent querying said location server for a location of said devices", LeBlanc clearly teaches this limitation.

LeBlanc teaches an "intelligent agent-based location services" (see col.8, lines 21-24)

and col.10, lines 19-22). Furthermore, an agent to one of ordinary skill in the art is merely an automated process of performing some collective task on behalf of one or more users. Therefore, since LeBlanc teaches that the system comprises an agent and that the user initiates the process of learning the location; such process would be performed via an agent.

In response to the argument of claim 1, that LeBlanc does not explicitly teach "when said location server is unable to satisfy said query for said location of said device, said location server is operable to query a hierarchical server that is operable to query other location servers for the location of said device", LeBlanc clearly teaches this limitation. Although, LeBlanc shows only one location center 142 (see Fig.36) such description is merely for simplicity. LeBlanc teaches that plural location centers may reside (see col.13, lines 13-21). Therefore, determining whether or not the mobile station 140 to be located can be located via the application programming interface 136 (see col.63, lines 42-56), clearly incorporates such remote location servers.

The applicant(s) seem to be asserting that because the reference does not use the applicant(s) terminology or that because the reference does not state word for word the recited claim language, the reference does not teaches the broadly recited claim. The applicant(s) also ignore knowledge clearly available to one of ordinary skill in the art to reach this conclusion. Regardless of the number of figures in the LeBlanc patent, the examiner's citations are referenced to teach the functional limitation of the recited claims.

For similar reasons, independent claims 24, 39, and 45 remain rejected.

Art Unit: 2155

#### Conclusion

9. For the reasons above claims 1-51 have been rejected and remain pending.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL Y. WON whose telephone number is (571)272-3993. The examiner can normally be reached on M-Th: 10AM-8PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2155

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Won/

Primary Examiner

August 6, 2008

Application Number

Application/Control No.	Applicant(s)/Patent under Reexamination		
10/618,250	TATMAN ET AL.		
Examiner	Art Unit		
   MICHAEL Y WON	2155		